

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>5094-002PCT</b>	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. <b>PCT/JP2005/000347</b>	International filing date ( <i>day/month/year</i> ) <b>14 January 2005 (14.01.2005)</b>	Priority date ( <i>day/month/year</i> ) <b>15 January 2004 (15.01.2004)</b>
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant <b>Synapse Link, Corporation</b>		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	<p>This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.</p>																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"><input checked="" type="checkbox"/></td> <td style="width: 35%;">Box No. I</td> <td style="width: 50%;">Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report <b>17 July 2006 (17.07.2006)</b></p> <hr/> <p>Authorized officer</p> <p style="text-align: center; font-weight: bold;">Yoshiko Kuwahara</p> <p>e-mail: pt07@wipo.int</p>
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# 特許協力条約

発信人 日本国特許庁（国際調査機関）

代理人 佐藤 勝  様  あて名 〒135-8071 日本国東京都江東区有明 3-1 有明国際特許事務所
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REC'D 23 JUN 2005

WIPO PCT

PCT  
 国際調査機関の見解書  
 （法施行規則第 40 条の 2）  
 [PCT 規則 43 の 2.1]

発送日  
 (日.月.年)

21. 6. 2005

出願人又は代理人  
 の書類記号 5094-002PCT

今後の手続きについては、下記 2 を参照すること。

国際出願番号  
 PCT/J P 2005/000347

国際出願日  
 (日.月.年) 14. 01. 2005

優先日  
 (日.月.年) 15. 01. 2004

国際特許分類 (IPC) IntCl.<sup>7</sup> A01G1/00, A23B7/04, 7/06, A23L3/36

出願人 (氏名又は名称)  
 山下 重信

1. この見解書は次の内容を含む。

- ☒ 第 I 欄 見解の基礎
- ☐ 第 II 欄 優先権
- ☐ 第 III 欄 新規性、進歩性又は産業上の利用可能性についての見解の不作成
- ☒ 第 IV 欄 発明の単一性の欠如
- ☒ 第 V 欄 PCT 規則 43 の 2.1(a)(i) に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明
- ☐ 第 VI 欄 ある種の引用文献
- ☐ 第 VII 欄 国際出願の不備
- ☐ 第 VIII 欄 国際出願に対する意見

2. 今後の手続き

国際予備審査の請求がされた場合は、出願人がこの国際調査機関とは異なる国際予備審査機関を選択し、かつ、その国際予備審査機関が PCT 規 66.1 の 2(b) の規定に基づいて国際調査機関の見解書を国際予備審査機関の見解書とみなさない旨を国際事務局に通知していた場合を除いて、この見解書は国際予備審査機関の最初の見解書とみなされる。

この見解書が上記のように国際予備審査機関の見解書とみなされる場合、様式 PCT/ISA/220 を送付した日から 3 月又は優先日から 22 月のうちいずれか遅く満了する期限が経過するまでに、出願人は国際予備審査機関に、適当な場合は補正書とともに、答弁書を提出することができる。

さらなる選択肢は、様式 PCT/ISA/220 を参照すること。

3. さらなる詳細は、様式 PCT/ISA/220 の備考を参照すること。

見解書を作成した日

08. 06. 2005

名称及びあて先

日本国特許庁 (ISA/J P)  
 郵便番号 100-8915  
 東京都千代田区霞が関三丁目 4 番 3 号

特許庁審査官 (権限のある職員)

坂田 誠

電話番号 03-3581-1101 内線 3237

2B

9318

様式 PCT/ISA/237 (表紙) (2004 年 1 月)

## 第 I 欄 見解の基礎

1. この見解書は、下記に示す場合を除くほか、国際出願の言語を基礎として作成された。

☐ この見解書は、\_\_\_\_\_語による翻訳文を基礎として作成した。  
それは国際調査のために提出された PCT 規則 12.3 及び 23.1(b) にいう翻訳文の言語である。

2. この国際出願で開示されかつ請求の範囲に係る発明に不可欠なヌクレオチド又はアミノ酸配列に関して、以下に基づき見解書を作成した。

a. タイプ ☐ 配列表  
☐ 配列表に関連するテーブル

b. フォーマット ☐ 書面  
☐ コンピュータ読み取り可能な形式

c. 提出時期 ☐ 出願時の国際出願に含まれる  
☐ この国際出願と共にコンピュータ読み取り可能な形式により提出された  
☐ 出願後に、調査のために、この国際調査機関に提出された

3. ☐ さらに、配列表又は配列表に関連するテーブルを提出した場合に、出願後に提出した配列若しくは追加して提出した配列が出願時に提出した配列と同一である旨、又は、出願時の開示を超える事項を含まない旨の陳述書の提出があった。

4. 補足意見：

## 第IV欄 発明の単一性の欠如

1. 追加手数料納付の求め（様式PCT/ISA/206）に対して、出願人は、

☐ 追加手数料を納付した。

☐ 追加手数料の納付と共に異議を申立てた。

☒ 追加手数料の納付はなかった。

2. ☐ 国際調査機関は、発明の単一性の要件を満たしていないと判断したが、追加手数料の納付を出願人に求めないこととした。

3. 国際調査機関は、PCT規則 13.1、13.2 及び 13.3 に規定する発明の単一性を次のように判断する。

☐ 満足する。

☒ 以下の理由により満足しない。

請求の範囲 1 と、請求の範囲 5 と、請求の範囲 9 と、請求の範囲 10 と、請求の範囲 13 と、請求の範囲 14 と、請求の範囲 16 と、請求の範囲 23 と、請求の範囲 24 と、請求の範囲 25 と、請求の範囲 27 と、請求の範囲 29 とは、その特別な技術的特徴が著しく相違しており、これらの発明は単一の一般的発明概念を形成するように連関しているものとは認められない。

4. したがって、国際出願の次の部分について、この見解書を作成した。

☐ すべての部分

☒ 請求の範囲 1-4 に関する部分

第V欄 新規性、進歩性又は産業上の利用可能性についてのPCT規則43の2.1(a)(i)に定める見解、  
それを裏付ける文献及び説明

## 1. 見解

新規性 (N)	請求の範囲	1-4	有
	請求の範囲		無
進歩性 (IS)	請求の範囲	1-4	有
	請求の範囲		無
産業上の利用可能性 (IA)	請求の範囲	1-4	有
	請求の範囲		無

## 2. 文献及び説明

## 請求の範囲 1-4

空心菜を、全体の葉形、葉基より半径5.0センチメートル以内の葉の形状、及び同茎に有する葉同士の形状の差異により細分化して分別し、分別したものを選択して栽培する点は、国際調査報告に記載した文献には記載されていない。

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference S04-O-450CT1	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2005/001047	International filing date ( <i>day/month/year</i> ) 20 January 2005 (20.01.2005)	Priority date ( <i>day/month/year</i> ) 26 January 2004 (26.01.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SHARP KABUSHIKI KAISHA		

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The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 27 July 2006 (27.07.2006)
Facsimile No. +41 22 338 82 70	Authorized officer  <div style="text-align: center; font-weight: bold;">Yoshiko Kuwahara</div> e-mail: pt07@wipo.int

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**MAEDA Hiroshi**

**Osaka-Marubeni Bldg., 5-7,  
Hommachi 2-chome, Chuo-ku,  
Osaka-shi, Osaka  
5410053  
Japan**

**PCT**

REC'D 14 APR 2005

WIPO

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year)

**12.04.2005**

Applicant's or agent's file reference

**S04-O-450CT1**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2005/001047**

International filing date (day/month/year)

**20.01.2005**

Priority date (day/month/year)

**26.01.2004**

International Patent Classification (IPC) or both national classification and IPC

Int.Cl. **G02F 1/1343, G02F 1/1337**

Applicant

**SHARP KABUSHIKI KAISHA**

1. This opinion contains indications relating to the following items:



Box No. I

Basis of the opinion



Box No. II

Priority



Box No. III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability



Box No. IV

Lack of unity of invention



Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement



Box No. VI

Certain documents cited



Box No. VII

Certain defects in the international application



Box No. VIII

Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion

**30.03.2005**

Name and mailing address of the ISA/JP

**Japan Patent Office**

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Authorized officer

**TOSHIYUKI FUJITA**

Telephone No. +81-3-3581-1101 Ext. 3293

2X

3014

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001047

Box No. I

Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format  
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:



WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001047

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

☐ paid additional fees

☐ paid additional fees under protest

☐ not paid additional fees

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

The feature common to all of claims 1-24 is claim 1.

However, the search has revealed that claim 1 is not novel since this is disclosed in document 1-6 (JP 9-105908 A, JP 2001-337338 A, JP 9-274203 A, JP 11-194353 A, JP 11-153802 A, JP 2000-98405 A).

Consequently the common feature (claim 1) is not a special technical feature.

Therefore, these groups of inventions (claims 1-24) are not so linked as to form a single general inventive concept. So, claims 1-24 do not satisfy the requirement of unity of invention.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos. \_\_\_\_\_

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/JP2005/ 001047**

**Box No. V** Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims	<u>13-15, 18-20, 22-24</u>	YES
	Claims	<u>1-12, 16-17, 21</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-24</u>	NO
Industrial applicability (IA)	Claims	<u>1-24</u>	YES
	Claims		NO

**2. Citations and explanations**

D1:JP 9-105908 A(HITACHI LTD)1997.04.22  
D2:JP 2001-337338 A(MATSUSHITA ELECTRIC IND CO LTD)2001.12.07  
D3:JP 9-274203 A(FURONTEC INC)1997.10.21  
D4:JP 11-194353 A(NEC CORP)1999.07.21  
D5:JP 11-153802 A(NEC CORP)1999.06.08  
D6:JP 2000-98405 A(NEC CORP)2000.04.07  
D7:JP 2003-222906 A(MATSUSHITA ELECTRIC IND CO LTD)2003.08.08  
D8:JP 2003-255915 A(HITACHI LTD)2003.09.10  
D9:JP 9-146108 A(SEMICONDUCTOR ENERGY LAB)1997.06.06  
D10:JP 2000-310797 A(HITACHI LTD)2000.11.07

The subject matters of claims 1-7 do not appear to be novel with respect to D1-D6.

The subject matter of claim 8 does not appear to be novel with respect to D1-D4.

The subject matters of claims 9-12 do not appear to be novel with respect to D1-D6.

The subject matter of claims 13,22 does not appear to involve an inventive step in view of D1-D6 and D7. As is disclosed in D7, it is generally known to the person skilled in the art that ' the liquid crystal layer is driven at a frequency that is an even multiple of a frame frequency of a video signal, and a period in which the liquid crystal layer is driven by a positive electric field is equal to a period in which the liquid crystal layer is driven by a negative electric field '.

The subject matter of claims 14,23 does not appear to involve an inventive step in view of D1-D6 and D8. As is disclosed in D8, it is generally known to the person skilled in the art that ' a pulse voltage applied to the liquid crystal layer is set at zero temporarily at every vertical synchronization period of a video signal '.

The subject matter of claims 15,24 does not appear to involve an inventive step in view of D1-D6 and D8. As is disclosed in D8, it is generally known to the person skilled in the art that ' a pulse voltage applied to the liquid crystal layer in a vertical synchronization period of a video signal has a polarity opposite to that of a signal voltage applied to the liquid crystal layer in the same vertical synchronization period, at every vertical synchronization period '.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/001047

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: **Box No. V**

The subject matter of claim 16 does not appear to be novel with respect to D1-D3.

The subject matter of claim 17 does not appear to be novel with respect to D4.

The subject matter of claim 18 does not appear to involve an inventive step in view of D1-D6 and D9. As is disclosed in D9, the liquid crystal layer in the state of a hybrid orientation is generally known to the person skilled in the art.

The subject matters of claims 19-20 do not appear to involve an inventive step in view of D1-D6 and D10. As is disclosed in D10, the liquid crystal layer in which an absolute value of dielectric-constant anisotropy is three or less(one or less), is generally known to the person skilled in the art.

The subject matter of claim 21 appear to be obvious to a person skilled in the art with respect to D1-D6.